03-19-04

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:	Tsern, Ely K.	Confirmation No.:	Not yet assigned

Serial No.:	Not yet assigned *10742327*	Art Unit:	Not yet assigned

Filed:	December 18, 2003	Examiner:	Not yet assigned

For:	Power Control System For Synchronous Memory Device	Attorney Docket No:	60809-0146-US (formerly 9797-0146-999)

TRANSMITTAL OF POWER OF ATTORNEY BY ASSIGNEE
<u>REVOKING PREVIOUS POWERS OF RECORD</u>

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants' attorney encloses herewith a Revocation and Power of Attorney by Assignee with Certification Under 3.73(b) for the above identified application.

<u>Please change the attorney docket number to 60809-0146-US.</u> Future correspondence should be forwarded to customer no. **38426**.

The Commissioner is authorized to charge any fees associated with this communication to Morgan, Lewis & Bockius LLP deposit account no. 50-0310 (order no. 60809-0146-US). A copy of this sheet is enclosed for such purpose.

Respectfully submitted,

Date: March 17, 2004

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1-IPA: 505101.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: See Attached Schedule A

Serial No.: See Attached Schedule A

Filed: See Attached Schedule A

For: See Attached Schedule A

REVOCATION AND POWER OF ATTORNEY

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

S I R:

Rambus Inc., owner of the entire right, title and interest in, to and under the invention described and claimed in the above-identified patent application hereby revokes all previous powers of attorney and appoints Morgan, Lewis & Bockius LLP, customer no. 38426, and each of them, its attorneys, to prosecute this application, and to transact all business in the Patent and Trademark Office connected therewith.

In addition, the undersigned assignee also appoints Paul M. Anderson (Reg. No. 39,896), Paula J. Lagattuta (Reg No. 40,691), Jose G. Moniz (Reg. 50,192) and Kent R. Richardson (Reg. No. 39,443) of Rambus Inc., to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Please direct all future correspondence to Customer Number 38426, Morgan, Lewis & Bockius LLP, located at 3300 Hillview Avenue, Palo Alto, California 94304, and direct all telephone calls to Morgan, Lewis & Bockius LLP at (650) 493-4935.

Date: 2/24/04

Assignee: Rambus Inc.
Signature:
Typed Name: Kent R. Richardson
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1-IPA: 502924.1

SCHEDULE A

[U.S.]

Serial No./Patent No:	Filing Date/Issue Date:	Title:	1st Named Inventor:	Docket No:
09/271,611; 6,125,422	March 17, 1999; September 26, 2000	Dependent Bank Memory Controller Method And Apparatus	May, Bradley A.	60809-0003
09/346,682; 6,453,401	July 2, 1999; September 17, 2002	Memory Controller With Timing Constraint Tracking and Checking Unit and Corresponding Method	Barth, Richard M.	60809-0004
60/061,664	October 10, 1997	Power Control System For Synchronous Memory Device	Tsern, Ely K.	60809-0006PV
09/169,378; 6,263,448	October 9, 1998; July 17, 2001	Power Control System For Synchronous Memory Device	Tsern, Ely K.	60809-0006
60/061,682	October 10, 1997	Pipelined Memory Device	Barth, Richard M.	60809-0008PV
09/169,526; 6,356,975	October 9, 1998; March 12, 2002	Apparatus and Method For Pipelined Memory Operations	Barth, Richard M.	60809-0008
60/034,436	December 23, 1996	Redundancy For Wide Hierarchical I/O Organization	Stark, Donald C.	60809-0009PV
08/970,053 ABANDONED	November 13, 1997	Redundancy For Wide Hierarchical I/O Organizations	Stark, Donald C.	60809-0009
60/062,035	October 10, 1997	Gear Ratio Techniques and Distributed Clock Generation	Ware, Frederick A.	60809-0010PV
09/169,589; 6,396,887	October 9, 1998; May 28, 2002	Apparatus and Method For Generating a Distributed Clock Signal Using Gear Ratio Techniques	Ware, Frederick A.	60809-0010

60/061,503	October 10, 1997	Two Steps Writes	Davis, Paul G.	60809-0011PV
09/169,736; 6,343,352	October 9, 1998; January 29, 2002	Method and Apparatus For Two Step Memory Write Operations	Davis, Paul G.	60809-0011
60/061,769	October 10, 1997	Device Timing Compensation	Ware, Frederick A.	60809-0015PV
09/169,687; 6,226,754	October 09, 1998; May 1, 2001	Apparatus and Method For Device Timing Compensation	Ware, Frederick A.	60809-0015
60/061,770	October 10, 1997	High Performance Cost Optimized Memory	Barth, Richard M.	60809-0016PV
09/169,206; 6,401,167	October 9, 1998; June 4, 2002	High Performance Cost Optimized Memory	Barth, Richard M.	60809-0016
60/063,471	October 10, 1997	Techniques For Maximizing Information Transferred Over Limited Interconnect Resources in Electronic Systems	Abhyankar, Abhijitm	60809-0017PV
09/169,748; 6,347,354	October 9, 1998; February 12, 2002	Apparatus and Method For Maximizing Information Transfers Over Limited Interconnect Resources	Abhyankar, Abhijit M.	60809-0017
08/795,657; 6,125,157	February 6, 1997; September 26, 2000	Delay-Locked Loop Circuitry For Clock Delay Adjustment	Donnelly, Kevin S.	60809-0018
60/061,505	October 10, 1997	Method and Apparatus For Fail-Safe Resynchronization With Minimum Latency	Zerbe, Jared L.	60809-0019PV
09/169,372; 6,473,439	October 9, 1998; October 29, 2002	Method and Apparatus For Fail-Safe Resynchronization With Minimum Latency	Zerbe, Jared L.	60809-0019
09/306,897; 6,426,984	May 7, 1999; July 30, 2002	Apparatus and Method For Reducing Clock Signal Phase Skew in a Master-Slave System With Multiple Latent Clock Cycles	Perino, Donald V.	60809-0020

09/353,547	July 14, 1999	Apparatus and Method For Controlling A Master/Slave System Via Master Device Synchronization	Sidiropoulos, Stefanos	60809-0022
60/219,358; 6,523,089	July 19, 2000; February 18, 2003	Memory Controller With Power Management Logic	Tsern, Ely K.	60809-0024PV
09/907,338; 6,523,089	July 16, 2001; February 18, 2003	Memory Controller With Power Management Logic	Tsern, Ely K.	60809-0024
08/904,203; 5,945,862	July 31, 1997; August 31, 1999	Circuitry For the Delay Adjustment of a Clock Signal	Donnelly, Kevin S.	60809-0025
09/245,140	February 4, 1999	Spread Spectrum Clocking of Digital Signals	Perino, Donald V.	60809-0026
09/471,305; 6,404,660	December 23, 1999; June 11, 2002	Semiconductor Package With a Controlled Impedance Bus and Method of Forming Same	Gamini, Nader	60809-0027
09/358,054; 6,232,796	July 21, 1999; May 15, 2001	Apparatus and Method For Detecting Two Data Bits Per Clock Edge	Batra, Pradeep	60809-0029
60/061,767	October 10, 1997	Dram Core Refresh With Reduced Overhead	Tsern, Ely K.	60809-0030PV
09/169,376; 6,075,744	October 9, 1998; June 13, 2000	Dram Core Refresh With Reduced Spike Current	Tsern, Ely K.	60809-0030
09/222,590; 6,163,178	December 28, 1998; December 19, 2000	Impedance Controlled Output Driver	Stark, Donald C.	60809-0031
08/897,658; 6,205,191	July 21, 1997; March 20, 2001	Method and Apparatus For Synchronizing a Control Signal	Portmann, Clemenz	60809-0032
08/938,084; 6,067,594	September 26, 1997; May 23, 2000	High Frequency Bus System	Perino, Donald V.	60809-0033

60/057,900	September 5, 1997	Small-Swing to CMOS Conversion Circuit With Duty Cycle Correction	Portmann, Clemenz	60809-0034PV
09/146,286; 6,169,434	September 3, 1998; January 2, 2001	Conversion Circuit With Duty Cycle Correction For Small Swing Signals, and Associated Method	Portmann, Clemenz L.	60809-0034
60/057,400	August 29, 1997	Current Control Technique	Garrett, Jr., Billy Wayne	60809-0035PV
09/141,675; 6,094,075	August 27, 1998; July 25, 2000	Current Control Technique	Garrett, Jr., Billy Wayne	60809-0035
09/025,983; 6,014,042	February 19, 1998; January 11, 2000	Phase Detector Using Switched Capacitors	Nguyen, Nhat M.	60809-0036PV
09/179,139; 6,198,307	October 26, 1998; March 6, 2001	Output Driver Circuit With Well-Controlled Output Impedance	Garlepp, Bruno Werner	60809-0039
60/061,674	October 10, 1997	Method And Apparatus For Two-Step Memory Write Operations	Davis, Paul G.	60809-0041PV
60/061,692	October 10, 1997	Technical Description Version 0.1	Barth, Richard M.	60809-0042PV
60/061,697	October 10, 1997	Marketing Collateral	Barth, Richard M.	60809-0043PV
60/061,783	October 10, 1997	Technical Description Version 0.6	Barth, Richard M.	60809-0044PV
60/062,014	October 10, 1997	Technical Description Version 0.5	Barth, Richard M.	60809-0045PV
60/033,889	December 26, 1996	Shared Sense AMP Dram Cores	Barth, Richard M.	60809-0046PV
60/038,901	February 28, 1997	Low-Latency Small-Swing Clocked Receiver	Zerbe, Jared L.	60809-0047PV
08/896,934; 5,977,798	July 18, 1997; November 2, 1999	Low-Latency Small-Swing Clocked Receiver	Zerbe, Jared L.	60809-0047
60/039,612	March 12, 1997	Method of Source Coding With Inherent Clock Synchronization	Perino, Donald V.	60809-0048PV
60/073,353	February 2, 1998	Current Control Circuit	Garrett, Jr. Billy Wayne	60809-0049PV

09/478,916	January 6, 2000	Low Latency Multi-Level Communication Interface	Zerbe, Jared L.	60809-0050
09/706,238	November 2, 2000	Expandable Slave Device System	Garlepp, Bruno W.	60809-0051
09/291,091; RE36,781	April 13, 1999; July 18, 2000	Differential Comparator For Amplifying Small Swing Signals to a Full Swing Output	Lee, Thomas H.	60809-0052
60/158,189	October 19, 1999	A Method and Apparatus For Receiving High Speed Signals With Low Latency	Zerbe, Jared L.	60809-0053PV
09/478,914; 6,396,329	January 6, 2000; May 28, 2002	A Method and Apparatus For Receiving High-Speed Signals With Low Latency	Zerbe, Jared L.	60809-0053
09/398,252; 6,122,208	September 17, 1999; September 19, 2000	Circuit and Method For Column Redundancy For High Bandwidth Memories	Stark, Donald C.	60809-0054
09/513,721; 6,323,706	February 24, 2000; November 27, 2001	Apparatus and Method For Edge Based Duty Cycle Conversion	Stark, Donald C.	60809-0055
09/467,446; 6,657,468	December 20, 1999; December 2, 2003	Apparatus and Method For Controlling Edge Rates of Digital Signals	Best, Scott C.	60809-0056
09/629,862	August 1, 2000	Apparatus and Method For Operating a Master-Slave System With a Clock Signal and a Separate Phase Signal	Perino, Donald V.	60809-0057
09/579,776; 6,621,373	May 26, 2000; September 16, 2003	Apparatus and Method For Utilizing a Lossy Dielectric Substrate in a High Speed Digital System	Mullen, Donald R.	60809-0059
09/633,961; 6,504,448	August 8, 2000; January 7, 20030	Apparatus and Method For Transmission Line Impedance Tuning Using Periodic Capacitive Stubs	Yip, Wai-Yeung	60809-0060

09/420,949; 6,321,282	October 19, 1999; November 20, 2001	Apparatus and Method For Topography Dependent Signaling	Horowitz, Mark A.	60809-0061
09/390,217 **ABANDONED**	September 3, 1999	High Performance Cost Optimized Memory With Delayed Memory Writes	Barth, Richard M.	60809-0062
09/390,218; 6,204,697	September 3, 1999; March 20, 2001	Low-Latency Small- Swing Clocked Receiver	Zerbe, Jared L.	60809-0063
09/507,302	February 18, 2000	System Having Both Externally and Internally Generated Clock Signals Being Asserted on the Same Clock Pin in Normal and Test Modes of Operation Respectively	Lau, Benedict C.	60809-0064
09/564,064; 6,449,159	May 3, 2000; September 10, 2002	Semiconductor Module With Imbedded Heat Spreader	Haba, Belgacem	60809-0065
09/507,303; 6,266,730	February 18, 2000; July 24, 2001	High-Frequency Bus System	Perino, Donald V.	60809-0066
09/524,402; 6,539,072	March 13, 2000; March 25, 2003	Delay-Locked Loop Circuitry For Clock Delay Adjustment	Donnelly, Kevin S.	60809-0067
09/561,603; 6,266,292	April 27, 2000; July 24, 2001	Dram Core Refresh With Reduced Spike Current	Tsern, Ely K.	60809-0068
09/561,592; 6,343,042	April 27, 2000; January 29, 2002	Dram Core Refresh With Reduced Spike Current	Tsern, Ely K.	60809-0069
09/792,788	February 22, 2001	Stacked Semiconductor Module	Fox, Thomas F.	60809-0070
09/685,941; 6,376,904	October 10, 2000; April 23, 2002	Redistributed Bond Pads in Stacked Integrated Circuit Die Package	Haba, Belgacem	60809-0071

09/665,731; 6,282,604	September 20, 2000; August 28, 2001	Dependent Bank Memory Controller Method And Apparatus	May, Bradley A.	60809-0072
10/071,298	February 7, 2002	Semiconductor Module With Serial Bus Connection to Multiple Dies	Haba, Belgacem	60809-0074
09/038,353 **ABANDONED**	March 10, 1998	Performing Concurrent Refresh and Current Control Operations in a Memory Subsystem	Hampel, Craig E.	60809-0075
09/637,892; 6,310,814	August 8, 2000; October 30, 2001	Dram Apparatus and Method For Performing Refresh Operations	Hampel, Craig E.	60809-0076
09/698,997; 6,342,800	October 26, 2000; January 29, 2002	Charge Compensation Control Circuit and Method For Use With Output Driver	Stark, Donald C.	60809-0077
09/699,325; 6,594,326	October 27, 2000; July 15, 2003	Apparatus and Method For Synchronizing a Control Signal	Portmann, Clemenz	60809-0078
09/800,552; 6,448,813	March 6, 2001; September 10, 2002	Output Driver Circuit With Well-Controlled Output Impedance	Garlepp, Bruno W.	60809-0079
09/839,768	April 19, 2001	High-Frequency Bus System	Liaw, Haw-Jyh	60809-0080
10/087,395	March 1, 2002	Semiconductor Module	Haba, Belgacem	60809-0081
10/098,520	March 13, 2002	Memory Module	Haba, Belgacem	60809-0082
09/887,181	June 21, 2001	Power Control System For Synchronous Memory Device	Tsern, Ely K.	60809-0083
09/910,217; 6,516,365	July 19, 2001; February 4, 2003	Apparatus and Method For Topography Dependent Signaling	Horowitz, Mark A.	60809-0084
10/014,457	December 11, 2001	Memory System and Method For Two Step Write Operations	Davis, Paul G.	60809-0085
10/053,632	January 18, 2002	Apparatus and Method For Pipelined Memory Operations	Barth, Richard M.	60809-0086

09/978,278; 6,448,828	October 15, 2001; September 10, 2002	Apparatus and Method For Edge Based Duty Cycle Conversion	Stark, Donald C.	60809-0087
10/014,650; 6,661,268	December 11, 2001; December 9, 2003	Charge Compensation Control Circuit and Method For Use With Output Driver	Stark, Donald C.	60809-0088
09/421,073, 6,643,787	October 19, 1999; November 4, 2003	Bus System Optimization	Zerbe, Jared L.	60809-0089
10/091,979	March 4, 2002	Apparatus and Method For Generating a Distributed Clock Signal Using Gear Ratio Techniques	Ware, Frederick A.	60809-0090
10/045,864; 6,583,035	January 9, 2002; June 24, 2003	Semiconductor Package With a Controlled Impedance Bus and Method of Forming Same	Gamini, Nader	60809-0091
10/072,412; 6,514,794	February 5, 2002; February 4, 2003	Redistributed Bond Pads in Stacked Integrated Circuit Die Package	Haba, Belgacem	60809-0092
10/247,188	September 19, 2002	Multiple Sweep Point Testing of Circuit Devices	Chang, Timothy C.	60809-0093
10/066,488	January 30, 2002	Apparatus and Method For Maximizing Information Transfers Over Limited Interconnect Resources	Abhyankar, Abhijit	60809-0094
10/066,042; 6,597,616	January 29, 2002; July 22, 2003	Dram Core Refresh With Reduced Spike Current	Tsern, Ely K.	60809-0095
10/123,370	April 15, 2002	Method and Apparatus For Receiving High Speed Signals With Low Latency	Zerbe, Jared L.	60809-0096
60/376,947	April 30, 2002	Timing Calibration Apparatus and Method For a Memory Device Signaling System	Ware, Frederick A.	60809-0097PV

10/278,478	October 22, 2002	Timing Calibration Apparatus and Method For a Memory Device Signaling System	Hampel, Craig E.	60809-0097
60/498,511	August 27, 2003	Integrated Circuit Input/Output Interface With Empirically Determined Delay Matching	Hampel, Craig E.	60809-0098PV
10/676,648	September 30, 2003	Integrated Circuit With Bi-Modal Data Strobe	Hampel, Craig E.	60809-0099
10/128,167	April 22, 2002	High Performance Cost Optimized Memory	Barth, Richard M.	60809-0100
09/523,520; 6,530,062	March 10, 2000; March 4, 2003	Active Impedance Compensation	Liaw, Haw-Jyh	60809-0101
09/352,142 ABANDONED	July 13, 1999	Design Layout Migration Tool	Modarres, Hossein	60809-0102
09/484,431; 6,574,759	January 18, 2000; June 3, 2003	Method For Verifying and Improving Run-Time of a Memory Test	Woo, Steven Cameron	60809-0103
09/457,155	December 8, 1999	Memory System With Channel Multiplexing of Multiple Memory Devices	Garrett, Jr. Billy Wayne	60809-0104
09/531,124	March 17, 2000	Compliant Semiconductor Package	Haba, Belgacem	60809-0105
09/568,424; 6,545,875	May 10, 2000; April 8, 2003	Multiple Channel Modules and Bus Systems Using Same	Perino, Donald V.	60809-0106
10/177,747; 6,657,871	June 20, 2002; December 2, 2003	Multiple Channel Modules and Bus Systems Using Same	Perino, Donald V.	60809-0108
09/458,582; 6,643,752	December 9, 1999; November 4, 2003	Transceiver With Latency Alignment Circuitry	Donnelly, Kevin S.	60809-0109
09/393,884; 6,640,292	September 10, 1999; October 28, 2003	System and Method For Controlling Retire Buffer Operation in a Memory System	Barth, Richard M.	60809-0110

09/401,977; 6,571,325	September 23, 1999; May 27, 2003	Pipelined Memory Controller and Method of Controlling Access to Memory Devices in a Memory System	Satagopan, Ramprasad	60809-0111
10/101,243	March 20, 2002	Memory Module With Offset Data Lines	Garrett, Jr. Billy Wayne	60809-0112
09/471,304	December 23, 1999	Integrated Circuit Device Having Stacked Dies and Impedance Balanced Transmission Lines	Perino, Donald V.	60809-0113
09/547,881	April 12, 2000	Programmable Timing Module	Yeh, Gon-Jong	60809-0114
09/499,025	February 7, 2000	System and Method For Aligning Internal Transmit and Receive Clocks	Stark, Donald C.	60809-0115
10/020,921	December 19, 2001	Push-Pull Output Driver	Nguyen, Huy M.	60809-0116
60/343,905	October 22, 2001	Clock Phase Control Circuitry and Method For Generating Distinct Receive and Transmit Clocks For Multiple Data Pins of a Memory Controller	Perego, Richard E.	60809-0118PV
10/278,708	October 22, 2002	Phase Adjustment Apparatus and Method For a Memory Device Signaling System	Hampel, Craig E.	60809-0118
10/282,531	October 28, 2002	Method and Apparatus For Fail-Safe Resynchronization With Minimum Latency	Zerbe, Jared L.	60809-0119
10/346,859	January 16, 2003	Active Impedance Compensation	Liaw, Haw-Jyh	60809-0122
10/359,061	February 4, 2003	Apparatus and Method For Topography Dependent Signaling	Horowitz, Mark A.	60809-0124
10/366,865	February 14, 2003	Delay Locked Loop Circuitry For Clock Delay Adjustment	Donnelly, Kevin S.	60809-0125
10/455,059	June 4, 2003	Adjustable Clock Driver Circuit	Best, Scott C.	60809-0126

10/662,204	September 12, 2003	Adaptive Impedance Output Driver	Nguyen, Huy M.	60809-0127
10/369,301	February 18, 2003	Memory Controller With Power Management Logic	Tsern, Ely K.	60809-0129
10/410,390	April 8, 2003	Semiconductor Package With a Controlled Impedance Bus and Method of Forming Same	Gamini, Nader	60809-0130
10/446,880	May 27, 2003	Pipelined Memory Controller and Method of Controlling Access to Memory Devices in a Memory System	Satagopan, Ramprasad	60809-0131
10/661,225	September 12, 2003	System and Method For Adaptive Duty Cycle Optimization	Nguyen, Huy	60809-0132
10/661,862	September 11, 2003	Configuring and Selecting Duty Cycle For an Output Driver	Nguyen, Huy	60809-0133
10/453,368	June 2, 2003	Method For Verifying and Improving Run-Time of a Memory Test	Woo, Steven Cameron	60809-0135
10/135,222	April 29, 2002	Adaptive Signal Termination	Rajan, Suresh	60809-0136
10/625,914	July 22, 2003	DRAM Core Refresh With Reduced Spike Current	Tsern, Ely K.	60809-0137
10/684,618	October 13, 2003	Calibrated Data Communication System and Method	Zerbe, Jared L.	60809-0138
10/663,572	September 15, 2003	Method and Apparatus For Performing Testing of Interconnections	Yeung, Philip	60809-0139
10/700,655	November 3, 2003	Integrated Circuit With Timing Adjustment Mechanism and Method	Zerbe, Jared L.	60809-0140
10/690,402	October 20, 2003	Memory System With Channel Multiplexing of Multiple Memory Devices	Garrett, Jr. Billy Wayne	60809-0141
10/695,418	October 27, 2003	System and Method For Controlling Retire Buffer Operation in a Memory System	Barth, Richard M.	60809-0142

- 11 -

10/699,116	October 31, 2003	Transceiver With Latency Alignment Circuitry	Donnelly, Kevin S.	60809-0143
NOT YET ASSIGNED	December 18, 2003	Power Control System for Synchronous Memory Device	Tsern, Ely K.	60809-0146
10/731,718	December 8, 2003	Charge Compensation Control Circuit and Method For Use With Output Driver	Stark, Donald C.	60809-0147
NOT YET ASSIGNED	December 30, 2003	Semiconductor Package with a Controlled Impedance Bus and Method of Forming Same	Gamini, Nader	60809-0148
10/738,293	December 16, 2003	Expandable Slave Device System	Garlepp, Bruno W.	60809-0149
10/742,247	December 19, 2003	Apparatus and Method For Topography Dependent Signaling	Horowitz, Mark A.	60809-0152